

## Correct procedure was followed in shipping of Japanese ore

Bill Sinclair

News about uranium ore from Japan being shipped to International Uranium Corporation's (IUC) White Mesa Mill in Blanding has raised questions about how shipments to the uranium mill are regulated.

The uranium mill is licensed to accept ore or alternative feed material (including waste which meets criteria described below) for processing to produce yellowcake, uranium oxide that is fabricated into fuel rods for nuclear power plants. The original license was issued by the U.S. Nuclear Regulatory Commission, and the operations are now regulated by the Utah Division and Board of Radiation Control.

The uranium mill is licensed to accept ore from all sources. It can accept alternative feed material only if an amendment to the license is granted. The mill is regulated to protect human health and the environment.

For many years, the state of Utah has sought clarification from the U.S. Nuclear Regulatory Commission (NRC) as to what constitutes ore vs. waste. In 1991, the state challenged an NRC approval of a license amendment that authorized the former operators of the White Mesa Mill to receive and process waste rock and pond bottom sludge from the Teledyne Wah-Chang Corporation in Oregon.

Ultimately, it was the NRC's Atomic Safety and Licensing Board who decided that the NRC staff had acted within their regulations to grant the amendment.

However, NRC was required to define a written process for approving alternate feed license amendment applications, which included determinations that 1) the alternate feed is ore under the regulatory definition, 2) the feed material does not contain hazardous waste, and finally 3) the ore is being processed primarily for the uranium. The term "alternate feed material" thereafter was used to describe materials other than ore that a uranium mill intended to process.

In 1998, the state appealed the NRC approval of IUC's processing of the "Ashland 2" material from a U.S. Department of Energy clean-up project. Of concern to the state was the fact that the amount of recoverable uranium in an alternative feed material, coupled with the low value of uranium recovered, was far less than the revenue received by IUC for accepting the materials and then processing and disposing of the tailings.

It was the NRC's Atomic Safety and Licensing Board who determined that the NRC had no authority to evaluate these types of amendment applications regarding financial criteria and that the NRC concerns were matters of health and safety. Therefore any concentration of uranium or thorium in alternate feed material was ruled acceptable.

The Japanese ore has been determined to be ore, not waste, and the IUC mill has a license to mill the ore. No license amendment is required under federal or state law to import uranium ore for milling from a foreign source.

However, a license amendment from the NRC for importation and a license amendment from the DRC for processing would be required if the material were alternate feed material from a foreign source. Public health and the environment are being protected.

Bill Sinclair is the deputy director of the Utah Department of Environmental Quality.